

received 05/13/2014  
Project 8452  
Remediation 200406225

Client Sample Results

Client: Pioneer Natural Resources USA, Inc. TestAmerica Job ID: 280-54740-1  
Project/Site: Pioneer Natural Resources

Client Sample ID: ROMERO 23-14 NATIVE NORTH Lab Sample ID: 280-54740-1  
Date Collected: 04/24/14 14:15 Matrix: Solid  
Date Received: 04/26/14 08:50 Percent Solids: 82.8

Method: 6020 - Metals (ICP/MS)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	2.9		0.12		mg/Kg	☆	04/29/14 07:30	04/29/14 15:27	1	

General Chemistry										
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Percent Moisture	17		0.10		%			04/30/14 13:26	1	

## Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 NATIVE EAST**

**Lab Sample ID: 280-54740-2**

Date Collected: 04/24/14 14:20

Matrix: Solid

Date Received: 04/26/14 08:50

Percent Solids: 84.2

### Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.6		0.10		mg/Kg	☆	04/29/14 07:30	04/29/14 15:30	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		0.10		%			04/30/14 13:26	1

## Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 NATIVE SOUTH**

**Lab Sample ID: 280-54740-3**

**Date Collected: 04/24/14 14:25**

**Matrix: Solid**

**Date Received: 04/26/14 08:50**

**Percent Solids: 81.8**

### Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.5		0.11		mg/Kg	☼	04/29/14 07:30	04/29/14 15:34	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		0.10		%	—		04/30/14 13:26	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 NATIVE WEST**

**Lab Sample ID: 280-54740-4**

Date Collected: 04/24/14 14:28

Matrix: Solid

Date Received: 04/26/14 08:50

Percent Solids: 87.8

## Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		0.11		mg/Kg	☼	04/29/14 07:30	04/29/14 15:38	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		0.10		%	—		04/30/14 13:26	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 TOP OF PIT**

**Lab Sample ID: 280-54740-5**

Date Collected: 04/24/14 14:30

Matrix: Solid

Date Received: 04/26/14 08:50

## Method: 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	21		1.2		No Unit		04/28/14 12:54	05/02/14 03:55	10

## Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.6		0.099		mg/Kg	☼	04/29/14 07:30	04/29/14 15:41	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11		0.10		%			04/30/14 13:26	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	9.14		0.100		SU			04/27/14 13:30	1
Specific Conductance	860		20		umhos/cm			04/27/14 13:29	1

TestAmerica Denver

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 BOTTOM OF PIT**

**Lab Sample ID: 280-54740-6**

**Date Collected: 04/24/14 14:35**

**Matrix: Solid**

**Date Received: 04/26/14 08:50**

**Percent Solids: 78.3**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		7.4		ug/Kg	☼	04/29/14 16:30	04/30/14 03:00	1
Ethylbenzene	ND		7.4		ug/Kg	☼	04/29/14 16:30	04/30/14 03:00	1
Toluene	ND		7.4		ug/Kg	☼	04/29/14 16:30	04/30/14 03:00	1
Xylenes, Total	ND		7.4		ug/Kg	☼	04/29/14 16:30	04/30/14 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		58 - 140	04/29/14 16:30	04/30/14 03:00	1
Toluene-d8 (Surr)	101		80 - 126	04/29/14 16:30	04/30/14 03:00	1
4-Bromofluorobenzene (Surr)	104		76 - 127	04/29/14 16:30	04/30/14 03:00	1
Dibromofluoromethane (Surr)	92		75 - 121	04/29/14 16:30	04/30/14 03:00	1

## Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.5		mg/Kg	☼	04/29/14 15:59	04/30/14 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		77 - 123	04/29/14 15:59	04/30/14 23:46	1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.4		4.7		mg/Kg	☼	04/30/14 10:45	05/01/14 11:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	56		49 - 115	04/30/14 10:45	05/01/14 11:56	1

## Method: 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	80		1.2		No Unit	—	04/28/14 12:54	05/02/14 03:57	10

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	400		1.1		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Boron	ND		11		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Cadmium	ND		0.55		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Calcium	7000		55		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Magnesium	2900		22		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Molybdenum	ND		2.2		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Silver	ND		1.1		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1
Sodium	5900		550		mg/Kg	☼	04/29/14 07:30	04/30/14 01:54	1

## Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.3		0.11		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Chromium	14		0.22		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Copper	36		0.27		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Lead	18		0.11		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Nickel	16		0.16		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Selenium	0.38		0.22		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1
Zinc	100		1.1		mg/Kg	☼	04/29/14 07:30	04/29/14 15:45	1

TestAmerica Denver

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Pioneer Natural Resources

TestAmerica Job ID: 280-54740-1

**Client Sample ID: ROMERO 23-14 BOTTOM OF PIT**

**Lab Sample ID: 280-54740-6**

Date Collected: 04/24/14 14:35

Matrix: Solid

Date Received: 04/26/14 08:50

Percent Solids: 78.3

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	73		22		ug/Kg	☼	04/30/14 11:35	04/30/14 19:50	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		0.10		%	—		04/29/14 13:10	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	9.06		0.100		SU	—		04/27/14 13:30	1
Specific Conductance	2900		19		umhos/cm	—		04/27/14 13:29	1